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PERCEIVED OPPORTUNITIES AND CHALLENGES IN ONLINE LEARNING AND ACADEMIC PERFORMANCE OF EDUCATION STUDENTS IN ISABELA STATE UNIVERSITY

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Abstract

The study was conducted to determine the profile of the respondents in terms of age and sex; find the academic performance of the respondents during the First Semester of SY 2020-2021; determine the opportunities and challenges in online learning perceived by the respondents; find the difference on the respondents' perceived opportunities and challenges in online learning when grouped according to sex; and find the relationship between the respondents' age, academic performance, and their perceived opportunities and challenges in online learning.

The study utilized the descriptive correlational method as research design, random sampling technique as participants selection, and online survey questionnaire as data gathering tool. The respondents of the study were the Bachelor of Elementary Education students of Isabela State University-Echague Campus.

The results of the study showed that there is no significant difference between the perceived opportunities and challenges in online learning of the respondents when they are grouped according to sex. Also, there is no significant relationship between the respondents' age, academic performance, and their perceived opportunities and challenges in online learning.

Keywords: Online Learning, Challenges and Opportunities, Elementary Education

INTRODUCTION

Due to COVID-19, a global pandemic that began last March 2021, no one can leave the house premises. With this pandemic, the Philippine Government created unprecedented social containment measures to prevent the widespread of the disease. These measurements include the social distancing, limited opening of establishments, and physical closure of educational institutions. With the problems facing this deadly virus, the Isabela State University - Echague Campus established a distance-learning opportunity to enable students to complete the Academic Year 2019 - 2020. Allen (2017) defined online learning as education where instruction and learning occur at a distance or not in the same physical space. Often this type

of education spans temporal boundaries since it is predominantly delivered asynchronously or not in real-time using an array of digital technologies.

However, there are situations where instruction and learning can happen synchronously (in real-time) using web-based technologies. In addition, Gurajena (2021) discussed that one of the opportunities in online learning offers flexible learning to students who can meet the different needs of a diverse range of students. It enables the students to choose when and how they want to learn. Through access to the learning platform, the students have to communicate with their lecturers. This enables the students to handle their schoolwork and social life. The recent findings of Khan et al. (2021) showed that the challenges faced by Delhi's students in online learning are lack of interaction with teachers in online classes and low motivation for study due to a lot of distractions at home.

Statement of the Problem

This research aimed to determine the perceived opportunities and challenges in online learning and the academic performance of education students at Isabela State University. The following research questions were formulated as follows:

1. What is the profile of the respondents in terms of:
 - a. Age; and
 - b. Sex?
2. What is the academic performance of the respondents during the First Semester of SY 2020-2021?
3. What are the opportunities and challenges in online learning perceived by the respondents?
4. What is the difference in the respondents' perceived opportunities and challenges in online learning when grouped according to Sex?
5. What is the relationship between the respondents' age, academic performance, and perceived opportunities and challenges in online learning?

Scope and Limitations

The study focused on the perceived opportunities and challenges in online learning and its interaction with the academic performance of education students in Isabela State University-Echague Campus for School Year 2020-2021.

Literature Review

According to Stafford Global, online learning or online education is a term used to refer to courses that are studied without the need to be physically present at the school, college, or university. Magsambol (2020) stated that it is a learning delivery mode where interaction occurs between the teacher and the students who are geographically remote during instruction. This means lessons are delivered outside the traditional face-to-face setup. Malley (2020) stated that distance and online learning technologies are perceived by students as having some benefits, although they are not necessarily knowledge-related. On the other hand, Barrot et al. (2021) showed in their findings that the greatest challenges of the students linked to their learning environment and the least challenges are technological literacy and competency. Considering the recent study results of Said (2021), internet connection quality and reliability represented a major obstacle for students in some online lectures and during some online exams. Dabaj (2020) stated that female students had a better perception of online education than male students. Kor et al. (2016) also revealed that female students were more

successful at school than their male counterparts. However, according to Cuadrado-García et al. (2010) and Hung et al. (2010), studies suggested no differences between boys and girls in attitudes toward digital learning. The study by Simonds et al. (2015) revealed a statistically significant relationship between students' age and preference for certain types of online learning activities. Older students in the study indicated a much stronger preference for videos of the professor lecturing, while younger students tended to prefer more interactive learning strategies. The outcomes of their study demonstrated that mobile learning had a significant positive effect on the performance of students in universities in Pakistan. However, Abuhassna et al. (2020) revealed in their findings that there was a significant relationship between students' satisfaction and academic achievements in online or distance learning.

METHODOLOGY

Research Design

The descriptive-correlational design was used in this study, in which data gathered were recorded, described, interpreted, analyzed, and compared to provide adequate information on the respondents' perceived challenges and opportunities in online learning.

Respondents of the Study

The respondents of the study were the Bachelor of Elementary Education Students of the College of Education in Isabela State University-Echague Campus who were enrolled during the School Year 2020-2021. They were randomly selected using proportional allocation across three year levels from First Year to Third Year. The total number of respondents was determined using the 95% level of confidence and 5% margin of error.

Research Instrument

The instrument used was a research-adopted questionnaire from the study of Edward Lawless (2014), Collins K. Osei (2010), Jessie S. Barrot, Ian I. Llenares, Leo S. Del Rosario (2021), Chris C. Belgica, Junice A. Calugan, Juliet U. Dumo, Larilyn A. Simber (2020), and Theophilus K. Kokah (2015). The instrument consists of three parts, namely:

Part I- Personal profile of the respondents in terms of age, gender, year, and GWA (1st semester SY 2020-2021);

Part II- Opportunities in online learning perceived by the respondents; and

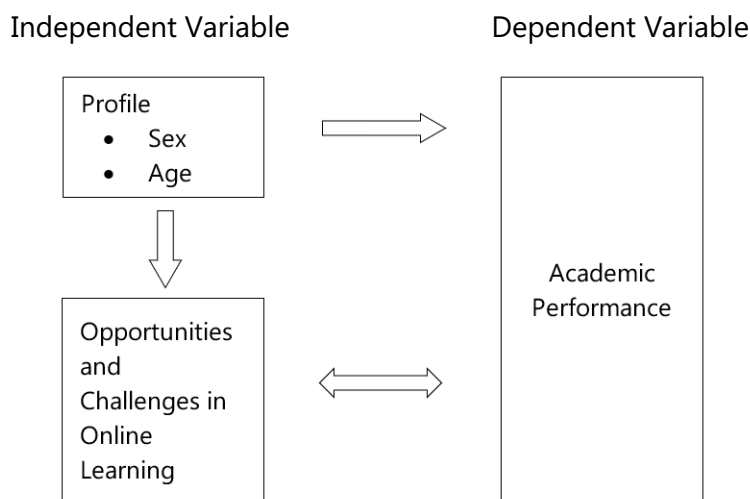
Part III- Challenges in online learning perceived by the respondents.

Statistical Tools and Treatment

The data collected were subjected to statistical treatment with the help of the statistician. The collected data were computer-processed using the Statistical Package of Social Sciences (SPSS). The following statistical tools were used:

1. Frequency counts and percentages were used to determine the profile of the respondents;
2. Weighted mean and standard deviation were used to describe the academic performance and the perceived Opportunities and Challenges in online learning of the respondents;
3. T-test was employed to determine the significant difference in the perceived opportunities and challenges in online learning when the respondents are grouped according to sex; and
4. Pearson's r correlation was applied to measure the significant relationship between the respondents' age, academic performance, and perceived opportunities and challenges in online learning.

Research Framework



RESULTS AND DISCUSSIONS

Profile of the Respondents

Table 1 presents the profile of the respondents in terms of age and course. The table further shows the frequency and percent distribution of the respondents.

Table 1. Distribution of the Respondents according to Age and Sex

Variables		Frequency n=153	Percent
Age	18 years old	14	9.20
	19 years old	26	17.00
	20 years old	52	34.00
	21 years old	49	32.00
	22 years old	11	7.20
	23 years old	1	0.70
Sex	Male	21	13.70
	Female	132	86.30

It can be seen in the table that most of the respondents are 20 years old with a frequency of 52 or 34% of the total sample, followed by 21 years old with a frequency of 49 or 32%; 19 years old with a frequency of 26 or 17%; 18 years old with a frequency of 14 or 9.20%; 22 years old with a frequency of 11 or 7.20%; and 23 years old with a frequency of 1 or 0.70%.

The table also indicates that the females dominate the respondents with a frequency of 132 (86.30%) while 21(13.70%) are males.

Academic Performance of the Respondents

Table 2 presents the academic performance of the respondents during the First Semester of SY 2020-2021.

Table 2. Academic Performance of the Respondents

Lowest Rating	Highest Rating	Mean	Standard Deviation
2.56	1.33	1.76	0.23

The table revealed that the highest General Weighted Average (GWA) given to the respondents is 1.33, while the lowest GWA given is 2.56. Overall, the grand mean of the GWA of the respondents is 1.76, with a standard deviation of 0.23. This implies that the majority of the GWA of the respondents is likely to be closed to 1.76; thus, the respondent's academic performance is within the average level.

Opportunities and Challenges in Online Learning as Perceived by the Respondents

Tables 3a and 3b present the opportunities and challenges in online learning as perceived by the respondents.

In terms of opportunities, the statement "Gain experience using web-based tools and technologies" obtained the highest mean with 3.29 and a qualitative description of "strongly agree". It means that students believe that the web tool and technologies are useful platforms for learning, while the statement "There are enough study facilities to help with my program" garnered the lowest mean of 2.86 and a qualitative description of "agree". This means that the online classroom experience helps them focus and make them feel proud. The grand mean of 3.3.06 (Strongly Agree) on the opportunities in online learning suggests that there are a lot of opportunities experienced by the respondents in online classes.

The table also revealed that, in terms of challenges, the statement "I learn effectively if I see my teacher in person while discussing" obtained the highest mean with 3.35 and with a qualitative description of "strongly agree". This means that the respondents still prefer face-to-face classes to online learning. The statement "I do not have internet access during online classes" got the lowest mean of 2.43 with a qualitative description of "agree". This means that students experience difficulties in online learning due to the inaccessibility to internet. Among the different online learning challenges students encounter are limited resources, poor internet infrastructure, and poor home learning environment. Schools with a similar learning context could use the findings of this study in developing and enhancing their respective learning continuity plans to mitigate the adverse impact of the pandemic.

This conforms with the study of Malley (2020) that distance and online learning technologies are perceived by students as having some benefits, although they are not necessarily knowledge-related.

Table 3a. Opportunities in Online Learning as Perceived by the Respondents.

	Opportunities in Online Learning	Mean	Qualitative Description
1.	Online learning helps me to plan for a task, monitor my performance, and reflect on the outcome.	3.20	Strongly Agree
2.	Online learning helps me to become more independent, and it offers a flexible learning environment.	3.13	Strongly Agree
3.	Enables students to reflect and think critically.	3.11	Strongly Agree
4.	Learn to manage their time more efficiently.	3.07	Strongly Agree
5.	Gain experience using web-based tools and technologies.	3.28	Strongly Agree
6.	Course material is well-structured and systematic.	3.01	Strongly Agree
7.	The instructor handles the e-learning units effectively and is always responsive to learners' needs.	3.00	Strongly Agree
8.	The instructor is knowledgeable and is always well prepared.	3.18	Strongly Agree
9.	The instructor's style of presentation holds my interest.	2.93	Agree
10.	The facilitator used the relevant instructional medium.	3.11	Strongly Agree
11.	The content of the sessions met my expectations.	2.97	Agree
12.	I received enough information from OL about my study	2.97	Agree
13.	There are enough study facilities to help with my program.	2.86	Agree
	Mean	3.06	Strongly Agree

Table 3b. Challenges in Online Learning as Perceived by the Respondents.

	Challenges in Online Learning	Mean	Qualitative Description
1.	Students lose their interest in learning online and do not perceive this kind of setup as supportive.	2.98	Agree
2.	I have limited preparation before an online class.	2.84	Agree
3.	I am intimidated by the technologies used for learning.	2.71	Agree
4.	I have a poor understanding of directions and expectations during online learning.	2.61	Agree
5.	I perceive technology as a barrier to getting help from others during online classes.	2.59	Agree
6.	I have outdated technology.	2.56	Agree
7.	I do not have internet access during online classes.	2.43	Agree
8.	I experience financial challenges when accessing learning resources and technology.	3.00	Strongly Agree
9.	I experience distractions at home as a learning environment	3.29	Strongly Agree
10.	I experience logging and intermittent internet loss during class.	3.33	Strongly Agree
11.	Too much activity and less time on teaching.	3.11	Strongly Agree
12.	I learn effectively if I see my teacher in person while discussing.	3.35	Strongly Agree
13.	Students just listen to the teacher to be able to answer the activity, but they are not learning.	3.10	Strongly Agree
	Mean	2.91	Agree

Difference in the Perceived Opportunities and Challenges in Online Learning when the Respondents are Grouped according to Sex

Tables 4a and 4b show the differences in the respondents' perceptions of online learning when grouped according to their sex.

It can be gleaned from the table that in terms of opportunity, the statement "The content of the sessions met my expectations" is found to be significant when the respondents are grouped according to sex with a t-value of 2.34 and a p-value of 0.02. This implies that female tends to be more satisfied with the teacher's strategies and method of teaching in delivering the lesson virtually rather than the male students.

In terms of challenges, the table shows no significant result in all of the statements. This implies that male and female students have no differences in their perception of the challenges in online learning.

The findings support the study of Cuadrado-Garcia et al. (2010) and Hung et al. (2010), which suggest no differences between male and female students in attitudes toward digital learning. However, the results contradicted the study of Dabaj (2020) that female students have a better perception of online education than male students.

Table 4a. Difference in the Perceived Opportunities in Online Learning in Terms of Sex.

Opportunities in Online Learning	Group Means		t-value	p-value
	Male	Female		
1. Online learning helps me to plan for a task, monitor my performance, and reflect on the outcome.	3.33	3.18	1.14	0.26
2. Online learning helps me to become more independent and it offers a flexible learning environment.	3.05	3.14	0.63	0.53
3. Enables students to reflect and think critically.	2.90	3.14	1.56	0.12
4. Learn to manage their time more efficiently.	3.10	3.07	0.15	0.88
5. Gain experience using web-based tools and technologies.	3.05	3.32	1.63	0.11
6. Course material is well-structured and systematic.	2.81	3.05	1.80	0.07
7. The instructor handles the e-learning units effectively and is always responsive to learners' needs.	2.90	3.02	0.73	0.46
8. The instructor is knowledgeable and is always well prepared.	3.00	3.20	1.55	0.12
9. The instructor's style of presentation holds my interest.	2.71	2.97	1.64	0.10
10. The facilitator used the relevant instructional medium.	2.95	3.14	1.35	0.18
11. The content of the sessions met my expectations.	2.67	3.02	2.34*	0.02
12. I received enough information from OL about my study	2.76	3.01	1.57	0.12
13. There are enough study facilities to help with my program.	2.71	2.89	1.08	0.28

Table 4b. Difference on the Perceived Challenges in Online Learning in Terms of Sex.

Challenges in Online Learning		Group Means		t-value	p-value
		Male	Female		
1.	Students lose their interest in learning online and do not perceive this kind of setup as supportive.	3.00	2.98	0.14	0.89
2.	I have limited preparation before an online class.	2.67	2.86	1.21	0.23
3.	I am intimidated by the technologies used for learning.	2.71	2.70	0.06	0.95
4.	I have a poor understanding of directions and expectations during online learning.	2.48	2.63	0.82	0.41
5.	I perceive technology as a barrier to getting help from others during online classes.	2.67	2.58	0.50	0.62
6.	I have outdated technology.	2.43	2.58	0.83	0.41
7.	I do not have internet access during online classes.	2.10	2.48	1.87	0.06
8.	I experience financial challenges when accessing learning resources and technology.	3.00	3.00	0.00	1.00
9.	I experience distractions at home as a learning environment	3.14	3.31	0.91	0.36
10.	I experience logging and intermittent internet loss during class.	3.29	3.34	0.30	0.76
11.	Too much activity and less time on teaching.	3.14	3.11	0.19	0.85
12.	I learn effectively if I see my teacher in person while discussing.	3.24	3.36	0.72	0.47
13.	Students just listen to the teacher to be able to answer the activity, but they are not learning.	3.33	3.06	1.49	0.14

Relationship between the Respondents' Age, Academic Performance, and their Perceived Opportunities and Challenges in Online Learning

Tables 5a and 5b show the relationship between the respondents' age, academic performance, and perceived opportunities and challenges in online learning.

As presented in Table 5a, the statement "Gain experience using web-based tools and technologies" reveals a significant relationship with age with r-value of 0.25 and a p-value of 0.01, which means as the students get older, they gain more experience in using web-based tools and technologies. The rest of the items were found to be not significantly related to age.

In terms of academic performance, the table reveals that all the statements are found to be not significantly related to the perceived opportunities of the respondents in online learning. With regard to the perceived challenges of the respondents and their relation to their age, the table shows a significant relationship on the statement "Students lose their interest in learning online and do not perceive this kind of setup as supportive," with an r-value of -0.17 and p-value of 0.04.

This implies that as student gets older, their interest in online learning improves. The item "I have limited preparation before an online class" with r-value of -0.17 and p-value of 0.03 shows a significant relationship with age which means that students get more preparation in an online class as they grow older. The item "I learn effectively if I see my teacher in person while discussing" has an r-value of 0.28 and a p-value of 0.01, implying that older students prefer face-to-face classes to online classes. Also, the item "Students just listen to the teacher to be able to answer the activity, but they are not learning" has an r-value of 0.19 and p-value of 0.02, which implies that as the students get older, they believe that listening to their teachers

in online class allows them to answer their activities but are not actually learning.

Table 5a. Relationship between the Respondents' Age, Academic Performance, and Their Perceived Opportunities in Online Learning

Opportunities in Online Learning		Age		Academic Performance	
		r-value	P-value	r-value	p-value
1.	Online learning helps me to plan for a task, monitor my performance, and reflect on the outcome.	0.02	0.80	0.12	0.13
2.	Online learning helps me to become more independent and it offers a flexible learning environment.	-0.05	0.52	0.07	0.41
3.	Enables students to reflect and think critically.	0.04	0.59	0.08	0.34
4.	Learn to manage their time more efficiently.	0.11	0.19	0.01	0.88
5.	Gain experience using web-based tools and technologies.	0.25*	0.01	0.06	0.48
6.	Course material is well-structured and systematic.	-0.03	0.67	-0.08	0.33
7.	The instructor handles the e-learning units effectively and is always responsive to learners' needs.	-0.05	0.56	-0.10	0.20
8.	The instructor is knowledgeable and is always well prepared.	-0.11	0.17	0.02	0.78
9.	The instructor's style of presentation holds my interest.	-0.01	0.94	-0.01	0.92
10.	The facilitator used the relevant instructional medium.	0.11	0.17	0.03	0.70
11.	The content of the sessions met my expectations.	0.02	0.78	-0.05	0.53
12.	I received enough information from OL about my study	-0.16	0.78	-0.10	0.24
13.	There are enough study facilities to help with my program.	-0.01	0.89	-0.05	0.58

In terms of academic performance, the table indicates a significant relationship in the perceived challenges of the respondents in online learning on the item "I am intimidated by the technologies used for learning" with r-value of 0.23 and a p-value of 0.01. It implies that the students' rating is negatively affected when they are intimidated by the technologies used in online learning. Also, the statement "I have a poor understanding of directions and expectations during online learning" has an r-value of 0.24 and a p-value of 0.01, which implies that the students tend to have lower academic performance when they have a poor understanding of directions and expectations in an online class.

The result conforms with the study of Simonds et al. (2015), which data revealed a statistically significant relationship between student age and preference for certain types of online learning activities. Older students in the study indicated a much stronger preference for videos of the professor lecturing, while younger students tended to prefer more interactive learning strategies.

Table 5b. Relationship between the Respondents' Age, Academic Performance, and their perceived Challenges in Online Learning.

Challenges in Online Learning		Age		Academic Performance	
		r-value	p-value	r-value	p-value
1.	Students lose their interest in learning online and do not perceive this kind of setup as supportive.	-0.17*	0.04	0.08	0.33
2.	I have limited preparation before an online class.	-0.17*	0.03	-0.15	0.06
3.	I am intimidated by the technologies used for learning.	0.03	0.69	-0.23*	0.01
4.	I have a poor understanding of directions and expectations during online learning.	-0.12	0.15	-0.24*	0.01
5.	I perceive technology as a barrier to getting help from others during online classes.	-0.15	0.07	-0.15	0.07
6.	I have outdated technology.	-0.02	0.84	-0.03	0.68
7.	I do not have internet access during online classes.	-0.02	0.76	-0.09	0.25
8.	I experience financial challenges when accessing learning resources and technology.	0.12	0.14	0.01	0.89
9.	I experience distractions at home as a learning environment	0.09	0.25	-0.05	0.54
10.	I experience logging and intermittent internet loss during class.	0.14	0.09	-0.05	0.55
11.	Too much activity and less time on teaching.	0.10	0.21	0.04	0.65
12.	I learn effectively if I see my teacher in person while discussing.	0.28*	0.01	0.14	0.08
13.	Students just listen to the teacher to be able to answer the activity, but they are not learning.	0.19*	0.02	0.10	0.24

Conclusions

In line with the foregoing findings of the study, the following conclusions were drawn:

1. The opportunities in online learning showed a positive way to improve and increase the productivity of the students in different aspects.
2. The findings imply that the perceptions of male and female respondents in opportunities and challenges in online learning do not significantly differ, except for their expectations in online classes in which female respondents are more satisfied than male respondents.
3. The study revealed that using web-based tools and technologies as a means of online learning will give a better opportunity and experience for the development of the students.
4. As the students get older, their interest in online learning improves.
5. Older students prefer face-to-face classes than younger students.

Recommendations

In the light of the findings and conclusions of the study, the following recommendations are worth considering:

1. Teachers should motivate and encourage students to value online learning as a new mode of learning. Proper assistance and guidance for students to use different technologies should be provided for them to cope with the lesson easily.
2. Students need extra effort to be mentally prepared and alert to attend on time in an online class.
3. Younger students should possess strong self-motivation in their classes online.
4. Students should make an effort to expand their knowledge and experiences using technologies as educational tools to be comfortable enough in online learning.

5. Students should pay attention and be active in discussions with the teacher virtually to achieve better academic performance.

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